DOCUMENT RESUME

ED 349 571 CS 213 528

AUTHOR Bodle, John V.
TITLE Are Student Newspapers as Readable, Interesting and Thorough as Community Newspapers? A Content Analysis of Student and Community Daily Newspapers.
PUB DATE Aug 92
NOTE 34p.; Paper presented at the Annual Meeting of the Association for Education in Journalism and Mass Communication (75th, Montreal, Quebec, Canada, August 5-8, 1992).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Audience Awareness; Comparative Analysis; Content Analysis; Higher Education; Information Sources; *News Writing; *Readability; *School Newspapers; *Student Publications; Text Structure
IDENTIFIERS *Community Newspapers; Flesch Reading Ease Formula; Journalism Research

ABSTRACT

A study compared six midwestern United States campus newspapers with their respective general circulation newspapers. A content analysis of these publications was designed to determine whether local news stories in daily student newspapers are as readable, interesting, and thorough as those found in general circulation daily newspapers. The daily student newspaper and the daily newspaper of general circulation in each of the six communities chosen for geographic diversity in the Midwest were sampled during four consecutive weeks. Results indicated that: (1) student newspapers and community dailies had more similarities than differences when the two types of newspapers were compared for readability and story interest levels; (2) neither laboratory nor independent student newspapers received a clear-cut advantage in issues of readability and interest scaling; and (3) student newspapers at large schools used more personal words and personal sentences than newspapers at smaller schools. (Thirteen tables of data and 29 footnotes are included.) (RS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED349571

A Content Analysis of Student and Community Daily Newspapers:

Are Student Newspapers as Readable, Interesting and Thorough as Community Newspapers?

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

John V. Bodle

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Accepted
~~Submitted~~ to the
National Conference
of AEJMC,
Newspaper Division
MacDougall Competition

CS213528

By
John V. Bodle
Graduate Student

E.W. Scripps School of Journalism
Ohio University

BEST COPY AVAILABLE

Statement of Topic and Problem

Hundreds of thousands of college students across the nation rely on their campus newspaper to learn of local issues and gain understanding of them. These budget-minded information consumers are often unwilling to purchase the local daily to meet their news needs.

The campus newspaper is also a training grounds for student reporters and writers. While one study indicates that 83% of college students read their college newspaper,[1] few studies have documented how thoroughly they are informing their audience of these local issues or how well they are doing so.

Scope of Study

This study will compare six Midwest campus newspapers with their respective general circulation newspaper. A content analysis of these publications will determine whether news stories in daily student newspapers are as *readable, interesting* and *thorough* as those found in general circulation daily newspapers.

Admittedly, such qualitative subjects do not easily lend themselves to quantification. Yet quantification is needed if journalists are to perform self-examination.

Readability has received quantitative legitimacy through the work of Rudolf Flesch.[2] General acceptance of his readability measuring techniques allows Flesch some standing with his journalistic colleagues when they discover he also created procedures for measuring how *interesting* a story is. Yet no quantitative measurement procedures have been discovered for measuring story *thoroughness* .

---

[1] Profile of Students as Consumer, a report commissioned by Communications and Advertising Services to Students (CASS) from Belden Associates, *Marketing and Media Decisions*, October, 1982, 17, p.46.

[2] Rudolf Flesch, *The Art of Readable Writing*, Harper and Row, 1949.

When journalists debate the relative merits of two or more news stories of the same event by competing newspapers, often a point-by-point analysis of the news writing ensues. Yet this verbal content analysis commonly lacks a category strategy to determine quantitatively what each reporter brought to his or her news story. Through an content analysis of source comments, this study presents a limited quantification of thoroughness. Categories are created to measure source and reporter contributions of fact, detail and reaction.

This study will result in a detailed analysis and comparison of news articles appearing in newspapers competing for news coverage. In the six midwestern communities chosen, news articles of a specific event appearing in both the daily student newspaper and the privately-owned daily will be analyzed to determine their comparative level of readability, interest and thoroughness. Flesch's procedures will be used to determine the relative readability and interest level. New procedures are developed to measure reporter and source contributions to story thoroughness.

This study will assist in determining how well college students are informed by their campus newspaper. It will also provide a quantification of news content through an analysis of source and reporter contributions of fact, detail and reaction. The results should be generalizable to all newspapers, regardless of the ownership form.

Review of Related Literature

Competition and News Content

A common notion is that many students do not read newspapers or care to be informed. While one study by Belden Associates indicates that 83% of students read their college newspaper,[3] the study does not indicate procedures used to determine this percentage. No other research study has been located that quantitatively or qualitatively determines the extent to which students rely on or use their student newspaper. The majority of student newspapers are distributed free,[4] which indicates budget-conscious students may prefer the campus newspaper. The Belden report also concluded that students in small towns will read their campus newspaper more often than students in larger communities.[5]

Readers primarily seek local news and advertising.[6] Local news is defined in a 1975 study first as being of a topical nature; secondly, in terms of its geographical proximity to the reader.[7] These researchers said it must be left to the local community to determine what topics would be considered local news and whether the geographic location of the event is considered to be of a local nature.

This present study compares the news coverage of local events between two daily newspapers in the same town. A student newspaper competing in news coverage represents one of the two daily newspapers.

---

[3]Profile of Students as Consumer, op. cit.

[4] John V. Bodle, "A Qualitative Study on the Perceptions of College Newspaper Advisers," an unpublished thesis, Ohio University, 1992. Few advisers indicate they receive income from circulation.

[5] Profile of Students as Consumer, op. cit.

[6]Gerald L. Grotta, Ernest F. Larkin and Barbara De Plois, "How Readers Perceive and Use a Small Daily Newspaper," *Journalism Quarterly*, 1975, 52, pp. 711-715.

[7]Maxwell E. McCombs and James P. Winter, "Defining Local News," *Newspaper Research Journal*, vol. 3, no. 1, pp.16-21.

Since this study considers the differences in content between student and general circulation newspapers (locally and regionally), it must first be determined whether a difference exists between locally competing daily newspapers.

Most early researchers indicated that the content of non-competitive and competitive newspapers does not differ greatly. Willoughby found that there was "no essential content differences" when he studied two competing dailies in an Indiana city.[8] Nixon and Jones determined in 1956 that in cities of less than 400,000 population there are no significant differences between the two groups, except for the size of the "news hole."[9] Similarly, Schweitzer and Goldman found little change in local news content during and after periods of competition.[10] Weaver and Mullins concluded in 1975 that news content differed little between economically "leading" and "trailing" publications when they studied 46 competing daily newspapers in 23 U.S. cities.[11]

Standing alone among these early studies was research by Rarick and Hartman, who concluded in 1966 that differences in news content between competing newspapers could be determined by analyzing content in the same newspaper over a longer, non-static period of years.[12] Their conclusions received support in 1973, when Stempel found that residents served by a cross-media monopoly (where local print and broadcast outlets are owned by the same entity) were less well informed than those with a diversity of

---

[8]Westly F. Willoughby, "Are Two Competing Dailies Necessarily Better That One?", *Journalism Quarterly*,1955, 33, pp.197-204.

[9]Raymond B. Nixon and Robert L. Jones, "The Content of Non-Competitive Vs. Competitive Newspapers," *Journalism Quarterly*, 1956, pp. 299-314.

[10] John C. Schweitzer and Elaine Goldman, "Does Newspaper Competition Make a Difference to Readers?", *Journalism Quarterly*, 52, Winter, 1975, pp. 706-710.

[11] David H. Weaver and L.E. Mullins, Content and Format Characteristics of Competing Daily Newspapers, *Journalism Quarterly*, 52, Summer, 1975, pp 257-264.

[12] Galen Rarick and Barrie Hartman, "The Effects of Competition on One Daily Newspaper's Content," *Journalism Quarterly*, 43, 1966, pp.459-463.

ownership.[13] More than a decade after Rarick's and Hartman's study Hicks and Featherston called for a reconsideration of Nixon's conclusions on news diversity after they found relatively little news content duplication between competing newspapers in the same city.[14]

A 1987 study by Lacy determined that readers receive more news hole through local newspaper competition, in agreement with a portion of Nixon's research. Lacy also found that newspapers in competition serve readers with more reporters and buy more wire services.[15] Two years later he implied that intense competition should more strongly satisfy readers than those receiving their news from newspapers with less competition. Competition, he argues, should more fully meet the information needs and wants of these readers more than readers within a monopoly market.[16]

Presumably, none of these studies compared a student daily newspaper competing for market share with a privately-owned daily in the same community. This study will do so.

Readability Comparisons

In 1949 Rudolf Flesch developed a method for determining readability and reporting story interest levels through content analysis.

By measuring the number of words in each sentence and the number of syllables per 100 words, Flesch brought quantification to the previously qualitative concern of readability.[17] The researcher created a scaling for

---

[13] Guido H. Stempel III, "Effects on Performance of a Cross-Media Monopoly," *Journalism Monographs*, June, 1973, 29.
[14] Ronald G. Hicks and James S. Featherston, "Duplication of Newspaper Content in Contrasting Ownership Situations," *Journalism Quarterly*, 55, 1978, pp. 549-553.
[15] Stephen Lacy, "The Effects of Intracity Competition on Daily Newspaper Content," *Journalism Quarterly*, 64, Summer-Autumn,1987. pp.281.
[16] Stephen Lacy, "A Model of Demand for News: Impact of Competition on Newspaper Content," *Journalism Quarterly*, 66, Spring 1989 pp. 40- 48.
[17] Rudolf Flesch, *The Art of Readable Writing*, Harper and Row, 1949.

readability, ranging from "very easy" to "very difficult." Flesch then indexed his "reading ease" to academic grade levels, making it possible to determine the audience's ability to read what is printed.

Blinn, Davis and Stempel determined that among college students there was no statistically significant relationship between the reading ease of a story and the percentage of those who finished reading it.[18] This result was not unexpected since, based on Flesch scaling, college students should be able to read more difficult stories as well as the easier articles. While the three researchers contributed initial evidence regarding the readability of news stories in student newspapers, their study was limited to 20 articles from one Ohio university.

Using a computer-aided evaluation of news writing samples, Porter compared the readability level of a student newspaper to general circulation newspapers and major wire services. He found that the student newspaper at Brigham Young University was producing articles written at grade level 12.9 (the end of the senior year in high school) while the overall average among the 10 newspapers studied was 11.19 (junior year of high school).[19] Porter and Stephens determined that newspaper editors may have difficulty in determining whether their reporters are writing at the level of their readers.[20] This present study will determine whether student newspapers are writing at a college level by analyzing 30 articles in six midwestern student dailies. It will also go beyond previous studies by comparing the readability

---

[18] John Blinn, Barbara Davis and Guido H. Stempel III, "Effect of Readability and Length of News Stories," *College Press Review*, 20, 1981, pp. 4-6.

[19] William C. Porter, edited by Earl Wilken"Study shows newspaper/wire copy hits 11th grade; freshman level," *Editor and Publisher*, October 3, 1981, p. 28.

[20] William C. Porter and Flint Stephens: "Estimating Readability: A study of Utah Editors' Abilities," *Newspaper Research Journal*, 10, 1989, pp. 87-95.

level of articles in the daily student newspaper with stories on the same subject appearing in the community's privately-owned daily.

Razik found that while news in metropolitan newspapers was significantly easier to read than in non-metro newspapers, this was not true for local news. Using the Dale-Chall readability formula, Razik found local news articles in non-metro papers written at the ninth-tenth grade level.[21] Stempel determined that local news is more readable than national and international, and that local sports is more readable than general local news.[22] This study will test aspects of these findings by measuring the readability level of local news in non-metro community and campus newspapers.

Comparison of News Story Interest Levels

While Flesch's formula has been used widely to determine readability, his story-interest scaling has received less attention. By counting the percent of "personal words" and "personal sentences," Flesch created a thermometer chart indicating on a continuum whether a story is dramatic or dull.[23] No academic research has been discovered casting doubt on his findings or in support of his work. While Flesch's procedures were developed for various types of written material, this study will produce what may be the first test of his interest theory on news writing.

What Sources Contribute

Harris found that student readers do differ from non-student readers in their motivation to read for more details. The researcher found this to be the single most important perceptual difference between student and non-

---

[21] Taher Razik, "A Study of American Newspaper Readability," *Journal of Communication*, December, 1969, 19, pp. 317-324.

[22] Guido H. Stempel III, "Readability of Six Kinds of Content in Newspapers," *Newspaper Research Journal*, October, 1981, pp. 32-37

[23] Rudolf Flesch, op. cit.

student readers. Non-students, she reports, read details for personal enjoyment. Students were found to read for more details as part of a "surveillance" dimension.[24] This study will measure the percentage of sentences in student newspapers containing detail (through procedures outlined in the methodology section) and compares it with the amount appearing in privately-owned newspapers.

---

[24] Wanda Harris, *Perceptions of Newspapers by Student and Non-Student Readers,* Abstract from paper presented at the Annual Meeting of AEJMC, 1986.

Hypotheses

Based on the three primary areas of this study --readability, story interest level and news thoroughness-- hypotheses were determined.

Readability

Daily student newspapers will be less readable than privately-owned dailies. As detailed by Flesch, this will indicate that student newspapers have more words per sentence and use words with more syllables. Larger campus newspapers will be more readable (and thus closer to readability levels found in privately-owned newspapers) than smaller campus newspapers. Additionally, student newspapers produced as part of the curriculum ("lab" publications) will be more readable (and thus closer to readability levels found in privately-owned newspapers) than independent student newspapers.

It is also hypothesized that the writing in student newspapers will fall below the readability level of its readers (based on the Flesch scale) and at a level similar to general circulation newspapers.

Interest Levels

It is expected that interest levels, based on the Flesch scaling, will be higher for the student newspaper. These student writers, it is hypothesized, will be more likely to use personal words and personal sentences (as defined by Flesch) because the university community is more tightly linked.

Additionally, it is hypothesized that the use of these personal words and sentences will be more common at smaller campuses (those with fewer students and generally less circulation). Thus, larger campus newspapers are believed to be more similar to privately-owned newspapers.

It is further hypothesized that student newspapers produced as part of the curriculum will be more interesting (based on the Flesch guidelines) than independent newspapers and more similar to interest level scaling in privately-owned dailies.

Thoroughness

When news articles covering the same event are compared, it is hypothesized that (in concert with Harris' research) student newspapers will have more sentences containing primarily detail than fact or reaction, and more detail sentences than privately-owned newspapers.

It was expected that half of all sentences will be attributed to a source other than the reporter in both student newspapers and those produced privately.

When stratified by the size of the university ("less than 25,000" and "more than 25,000") no difference in the ratio of fact, detail and reaction sentences is predicted. However laboratory publications, it is believed, will have less reaction sentences and greater detail, based on the belief that faculty instructors will encourage or discourage such story characteristics.

It is further hypothesized that student newspapers use fewer sources than general circulation newspapers. Additionally, it is expected that story length will be greater in student publications.

Method of Data Analysis

Only local news events covered by both newspapers in each community were used. This allows a direct comparison between the student newspapers and the adjudicated, general circulation newspaper in each community.

Readability Measurement

To determine reading ease, Rudolf Flesch's readability scale has been used. As described in the literature section, this study has counted the number of words in each sentence and the number of syllables per 100 words to determine how difficult a sentence is to understand.[25] The first, third and fifth paragraph of each story was analyzed. This "every other paragraph" continued until 100 words were counted.

Measuring a Story's Interest Level

This study has also used Flesch's interest scale. Following his procedures, the percentage of "personal words" and "personal sentences" was determined and measured on his thermometer chart, which indicates on a continuum whether a story is dramatic or dull. As described in the literature section, the percent of "personal words" was determined by dividing the total number of "personal words" by the total number of words in the sample and multiplying by 100. The number of "personal sentences" was determined by counting the number of "personal sentences" in each 100-word sample and dividing the number of these by the number of sentences in all the samples. Again, the first, third and fifth paragraph of each story were analyzed. This "every other paragraph" continued until 100 words were counted.

---

[25]Rudolf Flesch, *The Art of Readable Writing*, Harper and Row, 1949.

Measuring News Story Thoroughness: Limitations

News thoroughness can be subjective and qualitative. Only an informed local reader is able to determine if relevant facts have been omitted from the news story. This study will limit itself to information *included* in the article, not that *excluded*. from the news story Arguably, even the information contained within a story can be suspect as to its thoroughness. Only informed and detached local residents are best positioned to determine the truthfulness and completeness of source statements. This study is not a survey of story accuracy, and thus must limited itself from it.

Measuring Thoroughness: Scope of Study

But story thoroughness remains an area in need of research and quantification. Measurable characteristics of this qualitative concern would assist researchers in determining the relative strengths and weaknesses between two news stories covering the same event.

This study examines the use of sources in daily student newspapers and their respective community daily. It considers news stories covered by both newspapers in the community. It counts the number of sources used by each newspaper in covering the news event and the type of information each source provides.

Sources quoted in a local newspaper's story are counted and compared with those appearing in the community's other local newspaper. Comparisons are made between the average number of sources appearing in student newspapers and community dailies on a set number of stories.

Elaboration on Category Definitions

Since no previous research has been located that attempts to identify and categorize information contained in news stories, this author has developed categories.[26] Source statements were placed into three categories:

1) Presentation of fact statements

2) Details of that fact statement

3. Reactions to the fact and details

Fact statements are defined for categorization as the presentation of a subject matter or topic area not discussed previously within the article. A fact statement is commonly a summary sentence which, like an umbrella, encompasses most of the following sentences with details or reactions.

Details are the descriptions of these facts, without opinion or qualitative analysis.

Reactions are opinionated comments, or statements of preference. Verbs, such as prefer, want, like, dislike, wish, think, etc., are often illustrative of such reactionary statements. Personal pronouns also are commonly found in these source statements.

The unit of measurement is each sentence. Occasionally one sentence may contain a combination of fact, detail and reaction. In such cases, the last portion of the sentence is considered, since the preceding words and phrases are often used to prepare the reader for a conclusionary statement.

Since, arguably, the most important information commonly appears first in a news story, the first five paragraphs were coded for these three source content categories. Each sentence was treated as a single unit. The number of

---

[26] Attribution of sentences and its correlation with fact, detail and reaction sentences is examined at greater length in another research paper by this author. It was accepted and discussed at AEJMC's Theory and Methodology Conference in Cleveland, Ohio, in April, 1992.

information sources (not including the reporter) throughout the story were counted.

Attributed and Non-Attributed Source Definitions

Attributed and non-attributed source comments in the three categories were counted, but in separate categories.

A source was defined as someone other than the writer, regardless of whether the source is named or not. This named or unnamed source receives attribution; this indicates the comment did not come from the writer.

A non-attributed source comment was considered to be the writer's summary or opinion, and was categorized as such. If attribution immediately followed a non-attributed sentence, it was coded as an attributed source comment.

Story length was measured (in column inches), since length indicates a preponderance of either fact, detail or reaction.

"Thoroughness" Limitations

Elements such as grammar, style consistency and sentence structure are considered to be aspects of writing thoroughness, not information gathering. Such grammatical tabulation falls outside the scope of this study.

Categories have been created to measure the number of sources, type of information provided by these sources and information in the news story but not attributed. As discussed earlier in this section, this study did not attempt to determine the truthfulness and completeness of source statements; it is not a survey of story accuracy.

Category Selection

Categories were created to measure readability and story interest levels, as defined by Flesch. No previous studies were found using a content analysis approach to measure story thoroughness.

A coding sheet was constructed to quantify readability and story interest levels. It follows the measurement guidelines created by Flesch. This coding sheet also contains categories for measuring story thoroughness, by identifying and specifying source contributions to it.

Sampling

Media Used

Daily newspapers in six Midwest communities were selected for content analysis. Each community has one daily student newspaper and one daily newspaper of general circulation.

The communities chosen provide a geographical diversity within the Midwest. Two communities are in Ohio (Athens and Columbus), two in Indiana (Bloomington and Lafayette) and one each in Illinois (Carbondale) and Missouri (Columbia). Each has a state university located in it, with student populations ranging from 18,000 to 60,000.

Community and Newspaper Demographics

The selected communities were also chosen to provide variable comparisons between population demographics, university control of student newspapers and competitive factors.

Student newspapers in three of the communities are independent of university control while three are classroom 'lab" publications, integrated into the university's curriculum. Three serve student populations with less than 25,000, while three others have more than 25,000.

Sample Period

Four consecutive weeks were sampled during the period from Jan. 2, 1992 through Feb. 15, 1992. (Several of the student newspapers did not publish during the first 15 days of January.) Consecutive weeks were chosen since it is

probable that one daily newspaper in a given community may cover a news event several days before or after the other daily newspaper.

This study will be limited to the Monday through Friday editions during those four weeks. Articles present in both the student newspaper and the general circulation newspapers will be analyzed for content thoroughness and readability, using categories described and defined in the methods section.

Results

Midwestern student daily newspapers were found to be statistically different than privately owned community newspapers in terms of readability, but appear matched to its readership. (See **Table 1**).

Chi Square significance (X^2=15.02; d.f.=5, p<.02) was found within five Flesch readability categories ("very easy" and "easy" were combined), but not

---

Table 1: Readability Comparison (Using Flesch scaling)

Reading Ease Scale		Student Newspapers (n=180)	Privately-owned Daily Newspapers (n=180)	Academic Grade Level
Very Easy	(90 - 100)	0.0%	1.1%	4th
Easy	(80 - 89)	1.7%	3.9%	5th
Fairly Easy	(70 - 79)	12.8%	6.1%	6th
Standard	(60 - 69)	17.8%	24.4%	7-8th
Fairly Difficult	(50 - 59)	24.4%	17.2%	Some HS
Difficult	30 - 49)	35.0%	32.2%	HS, College
Very Difficult	(0 - 29)	8.3%	15.0%	College Grad

X^2=15.02; d.f.=5, p<.02
("Very Easy" and "Easy" Combined)

Reading Ease Scale		Student Newspapers (n=180)	Privately-owned Daily Newspapers (n=180)
Easier	(79-100)	14.5%	11.1%
Standard	(60 - 69)	17.8%	24.4%
More Difficult	(0-59)	67.7%	64.4%

X^2=2.84; d.f.=2, N.S.

Reading Ease Scale		Student Newspapers (n=122)	Privately-owned Daily Newspapers (n=116)
Fairly Difficult	(79-100)	36.1%	26.7%
Difficult	(60 - 69)	51.6%	50.0%
Very Difficult	(0-59)	12.3%	23.3%

X^2=6.4849; d.f.=2, p<.05

---

within the general categories of "easy" and "standard." Significant differences were found between student dailies and those privately-owned within the "difficult" category (X^2=6.4849; d.f.=2, p<.05). Thus student newspapers are found to be significantly different from community dailies only among those articles deemed difficult.

Yet "difficult" is defined (by Flesch scaling) as writing aimed at those with some college education--specifically the level of a college newspapers' audience. This research indicates that 67.7% of articles in campus newspapers (n=122) are written at the proper level for its readership. As for general circulation dailies, 64.4% of articles analyzed (n=116) are written for an audience with at least some college education. Articles in student newspapers are found to be "easy" to read (14.5%, n=26) more often than stories in privately owned community dailies (11.1%, n=20). Articles in community dailies were more commonly of "standard" readability (24.4%, n=44) than those appearing in student dailies (17.8%, n=32).

Table 2: Readability Comparison (Using Flesch scaling)

	Student Newspapers Student Pop. < 25,000 (n=90)	Student Newspapers Student Pop. > 25,000 (n=90)	Privately-owned Daily Newspapers (n=180)
Very Easy	0.00%	00.0%	1.1%
Easy	0.00%	3.3%	3.9%
Fairly Easy	12.2%	13.3%	6.1%
Standard	14.4%	21.1%	24.5%
Fairly Difficult	28.9%	20%	17.2%
Difficult	34.5%	35.6%	32.2%
Very Difficult	10.0%	6.7%	15.0%

Collapsed to Easier, Standard and Difficult

Between student newspaper categories: X^2=2.529, d.f.=2, N.S.

<25,000 and Privately Owned Categories: X^2=3.6095, d.f.=2, N.S.

>25,000 and Privately Owned Categories: X^2=.8486, d.f.=2, N.S.

The significance could not be tracked specifically to differences in the size of the university (see **Table 2**). While student newspapers at larger universities have articles that are generally more readable than those at smaller universities, the difference was not statistically significant (X^2=2.529, d.f.=2, N.S.). Nor could it it be determined whether student newspapers at larger or smaller universities caused the significant difference between student papers and privately-owned daily newspapers found in **Table 1**.

For decades educators have debated whether independent or laboratory student newspapers are better. This study finds no significant difference (X^2=2.52, d.f.=2, N.S.) between the two methods of student training in relation to story readability (See **Table 3**). Nor could significance be determined between privately-owned daily newspapers and student

---

Table 3: Readability Comparison (Using Flesch scaling)

	Student Newspapers Independent (n=90)	Student Newspapers "Lab" Publication (n=90)	Privately-owned Daily Newspapers (n=180)
Very Easy	0.00%	00.0%	1.1%
Easy	3.4%	00.0%	3.9%
Fairly Easy	11.0%	14.4%	6.1%
Standard	22.2%	13.3%	24.5%
Fairly Difficult	24.5%	24.5%	17.2%
Difficult	28.9%	41.1%	32.2%
Very Difficult	10.0%	6.7%	15.0%

Collapsed to Easier, Standard and Difficult
Between student newspaper categories: X^2=2.52, d.f.=2, N.S.
Independent and Privately Owned Categories: X^2=.68, d.f.=2, N.S.
"Lab" and Privately Owned Categories: X^2=4.659, d.f.=2, N.S.

Table 4: Writing Interest Comparison (Using Flesch scaling)

Human Interest Score		Student Newspapers (n=180)	Privately-owned Daily Newspapers (n=180)
Dramatic	(60 - 100)	11.7%	10.5%
Very Interesting	(40 - 59)	24.4%	26.7%
Interesting	(20 - 39)	32.8%	32.8%
Mildly Interesting	(10 - 19)	16.1%	13.3%
Dull	(0 - 9)	15.0%	16.7%

X^2=.90; d.f.=4, N.S.

newspapers that are independent (X^2=.68, d.f.=2, N.S.) or those produced as part of the journalism curriculum (X^2=4.659, d.f.=2, N.S.).

Student daily newspapers were found to be nearly as interesting as privately-owned newspapers (See **Table 4**). Based on Flesch procedures, 36.1% of campus newspapers sampled were either "dramatic" or "very interesting," while 37.2% of privately-owned newspapers were. Yet significance levels were not reached (X^2=.90; d.f.=4, N.S.), indicating the difference could have occurred by chance.

Daily student newspapers were not significantly different from privately-owned daily newspapers when the size of the university was considered (at the 25,000 level (See **Table 5**). While larger student newspapers were significantly more often than smaller campus dailies to be "very interesting" and less frequently dull (X^2=14.5908, d.f.=4, $p<.01$), no such similarities were found when each student newspaper category was compared with privately-owned newspapers.

Table 5: Writing Interest Comparison (Using Flesch scaling)

	Student Newspapers Student Pop. < 25,000 (n=90)	Student Newspapers Student Pop. > 25,000 (n=90)	Privately-owned Daily Newspapers (n=180)
Dramatic	14.4%	8.9%	10.5%
Very Interesting	14.4%	34.4%	26.7%
Interesting	34.5%	31.1%	32.8%
Mildly Interesting	15.6%	16.7%	13.3%
Dull	21.1%	8.9%	16.7%

Between student newspaper categories: X^2=14.5908, d.f.=4, p<.01
<25,000 and Privately Owned Categories: X^2=6.2189, d.f.=4, N.S.
>25,000 and Privately Owned Categories: X^2=4.4993, d.f.=4, N.S.

No significant differences were discovered when independent student newspapers, laboratory student newspapers and privately-owned dailies were compared with each other (See **Table 6**).

Few Content Differences

Contrary to the hypothesis, few content differences appeared between daily student newspapers and privately-owned dailies when each sentence in the

Table 6: Writing Interest Comparison (Using Flesch scaling)

	Student Newspapers Independent (n=90)	Student Newspapers "Lab" Publication (n=90)	Privately-owned Daily Newspapers (n=180)
Dramatic	8.9%	14.4%	10.5%
Very Interesting	26.7%	22.2%	26.7%
Interesting	37.8%	27.8%	32.8%
Mildly Interesting	12.2%	20.0%	13.3%
Dull	14.4%	15.6%	16.7%

Between student newspaper categories: X^2=5.1806, d.f.=4, N.S.
Independent and Privately Owned Categories: X^2=.84521, d.f.=4, N.S.
"Lab" and Privately Owned Categories: X^2=3.4656, d.f.=4, N.S.

first five paragraphs of 360 articles was sampled. As detailed in **Table 7**, the two newspaper categories used a nearly identical number of sentences in the first five paragraphs (1,305 in student newspapers and 1,324 in the privately owned publications). Additionally, the inclusion of fact, detail and reaction sentences was not significantly different (X^2=3.6767; d.f.=2, N.S.) between daily student newspapers and those privately-owned.

While Harris found that students read newspapers primarily for detail,[27] this study has determined that student newspapers do contain more detail, but not significantly more. Fact "umbrella" sentences occurred 13.7% in daily student newspapers and 14.5% in privately-owned dailies. In student dailies, more than half (53.3%) of all sentences appearing in the first five paragraphs presented details, as did 49.5% of privately-owned. Reaction sentences accounted for 33% of sentences in student newspapers and 36% of privately owned dailies. (See the Methodology section for details on the differentiation between sentences of fact, detail and reaction.)

Table 7: Thoroughness of Information

(Limited to source and reporter contributions of fact, details and reaction sentences.)

SOURCE AND REPORTER SENTENCES

	Student Newspapers (n=1305 sentences in 180 articles)	Privately-owned Daily Newspapers (1324 sentences in 180 articles)
Fact Sentences	13.7%	14.5%
Detail Sentences	53.3%	49.5%
Reaction Sentences	33.0%	36.0%

X^2=3.6767; d.f.=2, N.S.

---

[27] Harris, *Perceptions of Newspapers by Student and Non-Student Readers*, op.cit.

Most Sentences Not Attributed

Most sentences in student newspapers and privately-owned papers were not attributed to a source (See **Table 8**). Just 35.3% of sentences (n=2,629) in the total sample (both newspaper categories) were directly attributed to a person or document. An identical percentage is found when the two groups are separated: Reporters at student newspapers attributed 35% of the 1,305 sentences studied in 180 articles, while reporters at privately-owned newspapers attributed 35% of the 1,324 sentences in 180 articles.

This attribution trend continues within the three sentence categories analyzed–fact, detail and reaction (See **Table 8**). Most fact sentences were not attributed to a source. Of the 371 "umbrella" fact sentences appearing in both categories of newspapers, only 54 were attributed (14.6%). The remaining 85.4% of fact sentences were based on the reporter's conclusion or opinion. Similarly, this "interpretive reporting" (defined here as sentences without

---

Table 8: Source/Reporter Contributions

ALL SAMPLE SENTENCES (Student and Privately-owned)

	#of Sentences	Attributed	Not Attributed
Fact Sentences	371	14.6%	85.4%
Detail Sentences	1,351	21.7%	78.3%
Reaction Sentences	907	64.2%	35.8%

Among student newspapers (X^2=272.0416; d.f.=2, p<.001)
Among privately-owned newspapers (X^2=315.148; d.f.=2, p<.001)

All Sentences			
Both categories	2,629	35.3%	64.7%
Student Newspapers	1,305	35.4%	64.6%
Privately-owned	1,324	35.3%	64.7%

(n= 2,629)

---

attribution) occurs in 78.3% of detail sentences and 35.8% of reaction sentences when both newspaper categories are combined. This tendency to not attribute information reached statistical significance among student newspapers (X^2=272.0416; d.f.=2, p<.001) and those privately owned (X^2=315.148; d.f.=2, p<.001).[28]

Similarities in Attribution

There was no significant difference found between how the two newspaper categories attribute information (See **Table 9**).

Of attributed sentences (X^2=1.2738; d.f.=2, N.S.), fact contributions (as defined in the methodology section) comprised 5.2% of sentences in student

Table 9: Source/Reporter Sentences: Compared

SOURCE SENTENCES (ATTRIBUTED)

	Student Newspapers (n=461 sentences in 180 articles)	Privately-owned Daily Newspapers (468 sentences in 180 articles)
Fact Sentences	5.2%	6.4%
Detail Sentences	33.0%	30.1%
Reaction Sentences	61.8%	63.5%

X^2=1.2738; d.f.=2, N.S.

REPORTER SENTENCES (NOT ATTRIBUTED)

	Student Newspapers (n=844 sentences in 180 articles)	Privately-owned Daily Newspapers (856 sentences in 180 articles)
Fact Sentences	18.4%	18.9%
Detail Sentences	64.3%	60.2%
Reaction Sentences	17.3%	20.9%

X^2=4.1736; d.f.=2, N.S.

[28] Attribution of sentences and its correlation with fact, detail and reaction sentences is examined at greater length in another research paper by this author. It was accepted and discussed at AEJMC's Theory and Methodology Conference in Cleveland, Ohio, in April, 1992.

dailies while 6.4% of privately-owned newspapers do. Detail sentences comprised 33% of attributed sentences in student newspapers and 30.1% of community newspapers. Reaction sentences were most frequently attributed, with 61.8% in student dailies and 63.5% in newspapers privately-owned.

Of non-attributed sentences (X^2=4.1736; d.f.=2, N.S.), fact sentences were not attributed 18.4% of the time in daily student newspapers, while 18.9% were not attributed in community newspapers. Detail sentences comprised 64.3% of those not attributed in student newspapers and 60.2% of those privately-owned. Reaction sentences were either not attributed or the opinion of the reporter 17.3% of the time in student newspapers and 20.9% in privately-owned newspapers. Many of the non-attributed reaction statements appeared in sports stories.

As illustrated in **Table 10**, daily student newspapers with a student population of more than 25,000 were found to be not significantly different (X^2=.1973, d.f.=2, N.S.) than those privately-owned. However student papers

---

Table 10: Thoroughness of Information

(Limited to source and reporter contributions of fact, details and reaction sentences.)

	Student Newspapers Student Pop. < 25,000 (n=677)	Student Newspapers Student Pop. > 25,000 (n=628)	Privately-owned Daily Newspapers (n=1324)
Fact Sentences	13.0%	14.5%	14.5%
Detail Sentences	57.6%	48.6%	49.5%
Reaction Sentences	29.4%	36.9%	36.0%

Between student newspaper categories: X^2=11.2, d.f.=2, p<.01
Student papers w <25,000 circ. and Privately Owned Categories: X^2=11.901, d.f.=2, p<.01
Student papers w >25,000 circ. and Privately Owned Categories: X^2=.1973, d.f.=2, N.S.

---

at universitites with less than 25,000 population were found to be significantly different (X^2=11.901, d.f.=2, p<.01). Additionally, this stratification resulted in a significant difference between student newspaper groups (X^2=11.2, d.f.=2, p<.01). It would appear from these findings that student newspapers at larger universities (generally with greater circulation) tend to parallel their community dailies more closely in the use of facts, details and reaction information.

As detailed in **Table 11**, daily student newspapers produced as part of the university curriculum (a "lab" publication) has fewer reaction sentences (28.8%) and more detail (57.2%). The student "lab" newspapers were significantly different than independent student newspapers (X^2=7.55, d.f.=2, p<.05) and those privately-owned (X^2=11.5189, d.f.=2, p<.01).

Student and privately-owned dailies are nearly identical in their frequency of using sources (See **Table 12**). Student articles sampled (n=180) indicated an average of 2.62 sources per story, while community dailies (n=180) averaged 2.5 per story. Of the 923 sources found in the 360 articles,

---

Table 11: Thoroughness of Information
(Limited to source and reporter contributions of fact, details and reaction sentences.)

	Student Newspapers Independent (n=656)	Student Newspapers "Lab" Publication (n=649)	Privately-owned Daily Newspapers (n=1,324)
Fact Sentences	13.4%	14.0%	14.5%
Detail Sentences	49.4%	57.2%	49.5%
Reaction Sentences	37.2%	28.8%	36.0%

Between student newspaper categories: X^2=7.55, d.f.=2, p<.05
"Independent" and Privately Owned Categories: X^2=.962, d.f.=2, N.S.
"Lab" and Privately Owned Categories: X^2=11.5189, d.f.=2, p<.01

Table 12: Average Number of Sources (Includes all attributed sources of information, including identified and anonymous human sources as well as printed resource material.)

PER ARTICLE:	Number of Sources
Student Newspapers	2.62
n=180	
Privately-Owned Newspapers	2.50
n= 180	

PERCENT OF SAMPLE:	Number of Sources
Student Newspapers	51.1%
Privately-Owned Newspapers	48.9%
Sampling error of plus or minus 3.3%	
n= 923	

51.1% were quoted in student dailies while 48.9% appeared in community dailies.

Articles in privately-owned newspapers averaged slightly longer than those appearing in student dailies (n=360, **Table 13**). Student articles averaged 12.1 inches while community dailies averaged 14.2 inches. Articles in student newspapers were 7.9% shorter than those appearing in privately-owned dailies, but this difference may occur statistically by chance.

Table 13: Average Length of Articles

	Average Story Length (Col. Inch.)	Percent
Student Newspapers	12.1	46.0%
Privately-Owned Newspapers	14.2	53.7%
Sampling error of plus or minus 5.2%		
n= 360 articles		
n= 4,718.5 column inches		

Discussion

Readability

Chi Square significance (X^2=15.02; d.f.=5, p<.02) was found within five Flesch readability categories ("very easy" and "easy" were combined), but not within the general categories of "easy," "standard." Significant differences were found between student dailies and those privately-owned within the "difficult" category (X^2=6.4849; d.f.=2, p<.05). Thus student newspapers are found to be significantly different from community dailies only among those articles deemed difficult, not among stories determined by Flesch scaling to be "easier" or "standard."

Generally, the two show many similarities.

Contrary to the hypothesis, no statistical difference was determined between the readability of student newspapers when stratified by school size; student newspapers at larger universities were not more readable than those at smaller schools (See **Table 2**). Thus large student newspapers do not more closely reflect the readability levels of privately owned-dailies.

Similarly, student newspapers produced as part of the curriculum are not significantly more readable than those produced independently. Contrary to the hypothesis, "lab" newspapers do not more closely reflect the readability levels of privately-owned newspapers.

While it was expected that student newspapers would be writing at a level below its readership, the findings indicate that over two-thirds (67.7%) of are writing at the "difficult" level--specifically the level for a college audience. As for general circulation dailies, 64.4% of those analyzed are writing for an audience with at least some college education--a level perhaps greater than most of its readers.

Interest Level

Contrary to the hypothesis, no significant difference was found between the interest level of news articles in daily student newspapers and those privately-owned. In fact, the correlation was quite high ($p=.90$).

Yet while student newspapers in general were found to be similar to community dailies, a significant difference was found between student newspapers when student population (generally comparable to circulation) is considered. Contrary to the hypothesis ($p<.01$), smaller student newspapers tend to use fewer personal words and sentences (as defined by Flesch). Thus, smaller student newspapers are not any more different from community dailies than are large student newspapers.

Student "lab" newspapers were not found to be significantly more interesting than independently-produced student newspapers, contrary to the hypothesis. Again, student newspapers in all groups appear quite similar to those privately produced.

Thoroughness

It was hypothesized that student newspapers would have more detail sentences than fact or reaction, and more detail sentences than privately-owned newspapers. This study indicates that no significant difference exists between student and community dailies in the usage of fact, detail and reaction sentences. (See **Tables 7 and 9**). While Harris, in her research, indicates that students read primarily for detail,[29] this study finds the news editors at student newspapers do not give their readers significantly more than those appearing in privately-owned newspapers

The high number of reaction sentences may be due to the sampling method. In order to most accurately compare news writing samples, only

---

[29] Harris, *Perceptions of Newspapers by Student and Non-Student Readers*, op.cit.

stories found in both community publications about the same news event were used. A high percentage of stories in common to each set of local publications were sports related. Sports stories appear to carry more reaction sentences than those found in other sections of the newspapers.

While it was expected that half of all sentences would be attributed to a source other than the reporter in both student newspapers and those produced privately, the actual percentage was much less for both groups. Just one third (35%) of all sentences are attributed, contrary to the hypothesis. But as predicted, the two are highly congruent in their attribution rates.

Contrary to the hypothesis, there was a significant difference (X^2=11.2, d.f.=2, p<.01) in the ratio of fact, detail and reaction sentences when student newspapers were stratified by student population ("less than 25,000" and "more than 25,000", **Table 10**)). Student newspapers at larger universities were not significantly different from privately-owned dailies while dailies at smaller universities were significantly different (X^2=11.901, d.f.=2, p<.01).

In support of the hypothesis, lab newspapers were found to contain significantly more detail and less reaction sentences than independent student dailies (X^2=7.55, d.f.=2, p<.05) and those privately-owned (X^2=11.5189, d.f.=2, p<.01, See **Table 11**). Independent student dailies and privately-owned dailies were not significantly different.

It was also hypothesized that student reporters would have fewer sources than community newspapers. Student reporters were actually found to use sources more frequently, but not significantly so (See **Table 12**). Contrary to the hypothesis, articles in student newspapers were 7.9% shorter than those appearing in privately-owned dailies, but this difference may occur statistically by chance.

Conclusions

Student newspapers, while long considered to be inferior to to general circulation community newspapers, have more similarities than differences when the two types of newspapers are compared (based on Flesch's procedures) for readability and story interest levels. Student and professional newspapers are nearly identical in their respective use of fact, detail and reaction sentences. Similarly, story length and the number of sources used per article are not significantly different.

All significant differences determined from this content analysis study are localized to specific aspects of of the scaling; none indicate "global" similarities.

While many journalism faculties continue to debate the merits of laboratory versus independent student newspapers, neither receives a clear cut advantage on issues of readability and interest scaling (as defined in the methodology section) as a result of this study. Both types of student newspapers are writing at a readability level fit for college students (while reporters at the general circulation dailies in the six communities studied are writing well above the level of their readers). Student "lab" newspapers, however, are significantly different than general circulation newspapers ($p<.01$) in their use of fact, detail and reaction sentences, while independent student dailies are not significantly different from the professional publication.

Stratification by school size does indicate that larger student newspapers (with more than 25,000 population) use more personal words and personal sentences (defined by Flesch) than smaller student newspapers. This procedure also indicates that large student newspapers are more similar to

privately-owned dailies in its use of fact, detail and reaction sentences than are smaller student papers.

Summary

Student newspapers appear to be a readable and informative alternative to the community daily. They are written in a reading level appropriate to its audience, and their use of quotes and names (personal sentences and words, as defined by Flesch) is remarkably similar ($p=.90$) to its professional counterpart. Their presentation of facts, details and reaction sentences is also not significantly different. Even a comparison of story length and the average number of sources yields insignificant differences.

Further study should attempt to define more specifically the issue of news thoroughness. This study limited itself to a quantification of fact, detail and reaction sentences. New theories to quantify and measure sentence accuracy, the balanced use of sources within a news story, and other seemingly immeasurable aspects of news thoroughness would assist in defining a concept long argued over, primarily because of an inability to quantifiably cage it.